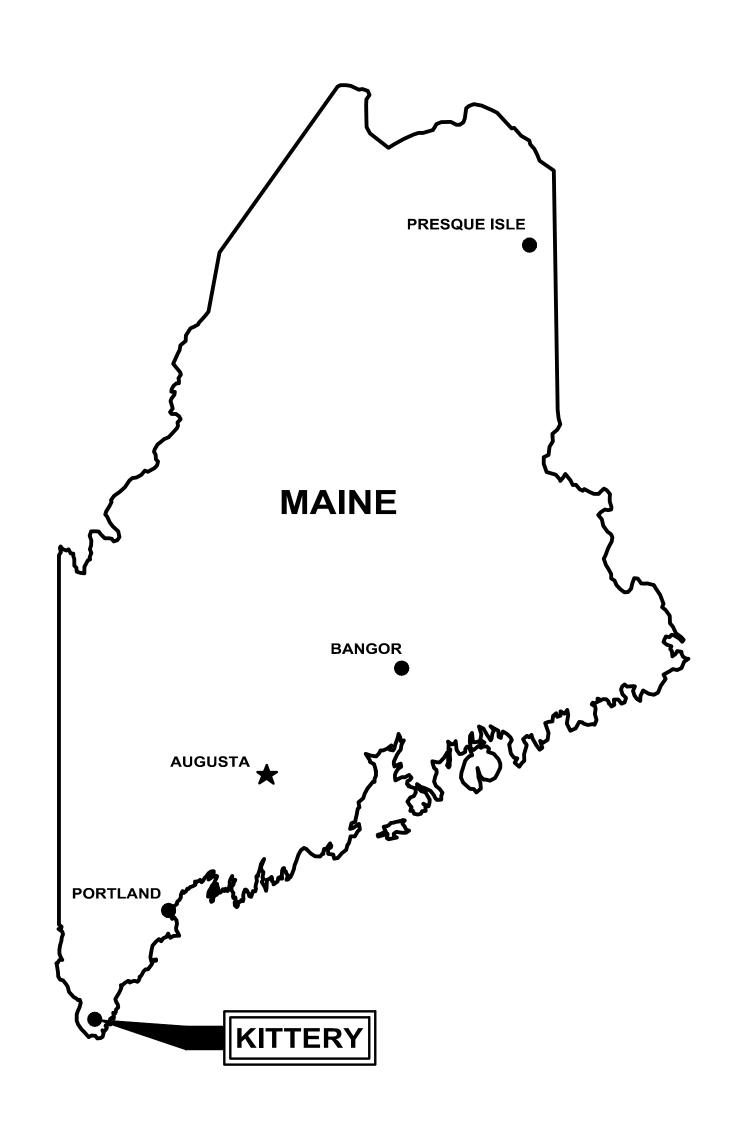
BID SET No.

TOWN OF KITTERY, MAINE

CONTRACT DRAWINGS FOR

PEPPERRELL ROAD DRAINAGE IMPROVEMENTS

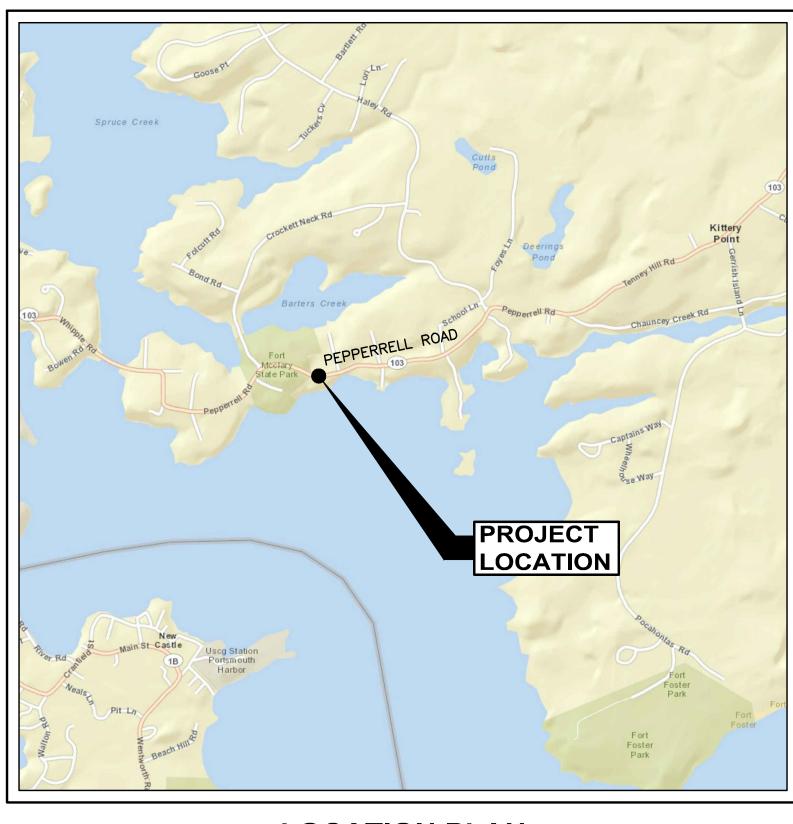
AUGUST 2012 PRELIMINARY REVIEW



RAWING INDEX

CIVIL

C-1 GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C-2 OVERALL SITE PLAN
C-3 EXISTING CONDITIONS AND DEMOLITION PLAN
C-4 PLAN & PROFILE: STA 0+00 TO STA 2+65
C-5 SITE LAYOUT PLAN ALTERNATE 1
C-6 DETAILS
C-7 EROSION CONTROL NOTES & DETAILS



LOCATION PLAN

PRELIMINARY FOR REVIEW ONLY WRIGHT-PIERCE Engineering a Better Environment

Offices Throughout New England 888.621.8156 | www.wright-pierce.com FOR REVIEW AUGUST 2012

FOR BIDDING

WP PROJECT No. 12424A

UTILITY CONTACTS ARE AS FOLLOWS:

FAIRPOINT COMMUNICATIONS:

ATTN: STEPHEN POLYOT

TEL. (207) 990-5280

CENTRAL MAINE POWER COMPANY:
ATTN: GARY NORTON
TEL. (207) 242-1247

KITTERY SEWER DEPARTMENT
ATTN: GEORGE KATHIOS
TEL. (207) 439-4546

KITTERY WATER DISTRICT: ATTN: MIKE ROGERS TEL. (207) 451-8316 COMCAST: DIGSAFE:
ATTN: GEORGE KIRKWOOD 1-888-DIG-SAFE
TEL. (603) 679-5695 EXT.1007

TOWN OF KITTERY:
DEPARTMENT OF PUBLIC WORKS
ATTN: MARY ANN CONROY
TEL. (207) 439-8118

- 3. CONTRACTOR IS RESPONSIBLE TO SECURE ACCESS TO BEACH AREA FOR EQUIPMENT AND MATERIALS.
- 4. ALL EXISTING SEWER, STORM DRAIN, AND WATER LINES WHICH ARE NOT BEING REPLACED UNDER THESE CONTRACT DRAWINGS AND WATER LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE UNLESS OTHERWISE INDICATED. ANY EXISTING SEWERS, STORM DRAIN, WATER LINES, AND CULVERTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER OR UTILITY OWNERS.
- 5. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
- 6. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48-HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
- 7. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS AND STATIONING SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY. EXISTING CONDITIONS BASED ON SURVEY PROVIDED BY THE TOWN.
- 8. THE CONTRACTOR SHALL INSTALL AND MAINTAIN TRAFFIC CONTROL DEVICES AS NECESSARY AND IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.).
- 9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRAFFIC FLOW AT ALL TIMES. THE CONTRACTOR IS REQUIRED TO SUBMIT A TRAFFIC CONTROL PLAN AND HAVE IT APPROVED BY THE OWNER PRIOR TO COMMENCING CONSTRUCTION. THE KITTERY POLICE DEPARTMENT (207-439-1638) AND FIRE DEPARTMENT (207-439-2262) ARE TO BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY STREET CROSSING. STREET CLOSURES ARE NOT ALLOWED. ONE LANE OF ALTERNATING TRAFFIC MUST BE MAINTAINED AT ALL TIMES.
- 10. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
- 11. OPEN TRENCHES ON THE SITE MAY BE LEFT OPEN IF THE CONTRACTOR PROVIDES ADEQUATE BARRICADING AND LIGHTS IN ACCORDANCE WITH OSHA REGULATIONS, MAINEDOT GUIDELINES AND REGULATIONS, CHAPTER 7 OF THE MUTCD, AND APPROVAL FROM THE OWNER.
- 12. ALL PROPOSED ROAD, DRIVE, AND SIDEWALK AREA SURFACES SHALL PITCH 1/4" PER FOOT MINIMUM, UNLESS OTHERWISE NOTED ON PLANS. ALL EXISTING ROAD, DRIVE, AND SIDEWALK AREAS SHALL MATCH EXISTING SLOPE CONDITIONS UNLESS OTHERWISE NOTED.
- 13. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- 14. THE CONTRACTOR SHALL NOTIFY ABUTTING RESIDENTS IN PERSON OR IN WRITING AT LEAST 24 HOURS IN ADVANCE OF WORKING IN AN AREA.
- 15. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH AND MAINTAIN A TELEPHONE NUMBER WHERE THE CONTRACTOR CAN BE REACHED 24 HOURS A DAY, 7 DAYS A WEEK, UNTIL THE PROJECT HAS REACHED SUBSTANTIAL COMPLETION.
- 16. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES, BUSHES, PLANTS, FLOWERS, STONE WALLS, FENCES, ETC. WITHIN THE CONSTRUCTION AREA UNLESS OTHERWISE NOTED ON PLANS OR AS DIRECTED BY THE TOWN.
- 17. ANY PAVEMENT TO BE REMOVED SHALL BE SAWCUT PRIOR TO REMOVAL. PAVEMENT IS TO BE SAW CUT AT ALL SIDE ROADS AND PAVED DRIVES, AS WELL AS THE BEGINNING AND END OF THE PROJECT. BUTT JOINTS SHOULD BE USED IN DRIVEWAYS AND SHIPLAP JOINTS IN THE ROADWAYS AND SHOULDERS.
- 18. THE CONTRACTOR SHALL REGRADE ALL DISTURBED AREAS AS NECESSARY FOR POSITIVE DRAINAGE.
- 19. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO ENGINEER FOR REVIEW FOR CONFORMANCE WITH PLANS. TEST PITS ARE REQUIRED AS NEEDED TO DETERMINE EXISTING UTILITY LOCATION AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND STRUCTURES AS SHOWN ON THE DRAWINGS. THE LAYOUT PLAN SHALL BE REVIEWED BY THE ENGINEER PRIOR TO CONSTRUCTION.
- 20. THE CONTRACTOR WILL UNDERTAKE ALL CLEARING OPERATIONS THAT ARE NOT THE RESPONSIBILITY OF THE UTILITY COMPANIES. THE TOWN SHALL MINIMIZE CLEARING OPERATIONS. CLEARING AND GRUBBING SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS. ALL GRUBBING AND STUMPS ARE THE PROPERTY OF THE CONTRACTOR AND WILL BE DISPOSED OF AT A SITE PROVIDED BY CONTRACTOR IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REQUIREMENTS.
- 21. SUITABLE EXCAVATED MATERIALS MAY BE INCORPORATED INTO THE PROJECT. THE OWNER HAS THE RIGHT OF FIRST REFUSAL OF ALL EXCESS SUITABLE MATERIAL FROM THE PROJECT. THIS PROVISION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATIONS TO REMOVE AND DISPOSE OF ANY MATERIAL DETERMINED BY THE ENGINEER TO BE UNSUITABLE FOR BACKFILLING OR EXCESS SUITABLE MATERIAL UNWANTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF UNSUITABLE AND EXCESS MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL LAWS AND REQUIREMENTS. THE CONTRACTOR SHALL NOT HAVE ANY RIGHT OF PROPERTY IN ANY MATERIALS TAKEN FROM ANY EXCAVATION, WITH THE EXCEPTION OF TREES TO BE REMOVED BY THE CONTRACTOR. USE AND PLACEMENT OF EXCAVATED MATERIAL IS PAID FOR ONLY AS COMMON EXCAVATION. TREES TO BE REMOVED SHALL BE THE PROPERTY OF THE CONTRACTOR.
- 22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PREVENTION OF EROSION. ALL DISTURBED EARTH SURFACES ARE TO BE STABILIZED IN THE SHORTEST PRACTICAL TIME AND TEMPORARY EROSION CONTROL DEVICES SHALL BE EMPLOYED UNTIL SUCH TIME AS ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED. TEMPORARY STORAGE OF EXCAVATED MATERIAL IS TO BE IN A MANNER THAT WILL MINIMIZE EROSION. MATERIALS AND METHODS USED FOR TEMPORARY EROSION CONTROL SHALL BE AS SPECIFIED BY THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PREPARED BY THE MAINE SOIL AND WATER CONSERVATION COMMISSION.
- 23. THE CONTRACTOR SHALL CONTROL DUST TO A TOLERABLE LIMIT AS DETERMINED BY THE RESIDENT ENGINEER OR TOWN. CONTRACTOR SHALL NOT TRACK OR SPILL EARTH AND DEBRIS ON PUBLIC STREETS OUTSIDE THE PROJECT AREA. STREETS OPEN TO THE PUBLIC SHALL BE KEPT SWEPT AND FREE OF DEBRIS. DUST CONTROL SHALL BE CONSIDERED INCIDENTAL TO ITEM 652.25.
- 24. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY HAY BALE FILTERS (OR SIMILAR DEVICES) TO PREVENT ENTRY OF SEDIMENT FROM RUNOFF WATERS DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ALL COLLECTED SEDIMENT, RESULTING IN HIS OPERATIONS UNTIL THE PROJECT IS SUBSTANTIALLY COMPLETE AND READY FOR FINAL PAYMENT. FINAL FLUSHING AND CLEANING OF THE STORM DRAIN SYSTEM PRIOR TO THE TOWN'S ACCEPTANCE IS INCIDENTAL TO THE CONTRACT.
- 25. THE CONTRACTOR SHALL COORDINATE PAVING WITH THE OWNER. ALL CATCH BASINS, SEWER MANHOLES AND OTHER BURIED FACILITIES WITH SURFACE ACCESS SHALL BE ADJUSTED TO MATCH FINAL GRADES BY TOWN CREWS PRIOR TO PLACEMENT OF SURFACE PAVEMENT, UNLESS OTHERWISE INDICATED. THE CONTRACTOR SHALL PAVE AROUND THE ADJUSTED FACILITIES.
- 26. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE TOWN AND ENGINEER.
- 27. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINAL GRADING WITH THE ENGINEER.
- 28. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE WORK LIMITS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE TOWN.

GENERAL NOTES (CONT.)

- 29. THE CONTRACTOR SHALL PROVIDE NOTIFICATION TO KITTERY PUBLIC WORKS, WATER DISTRICT, AND SEWER DEPARTMENT AT LEAST THREE DAYS PRIOR TO COMMENCING WORK
- 30. NEW DRAINAGE STRUCTURES AND EXISTING DRAINAGE STRUCTURES TO BE ALTERED OR REBUILT ARE TO BE CLEANED BY THE CONTRACTOR AND THE MATERIAL TO BE DISPOSED OF PER TOWN ORDINANCE. THERE WILL BE NO PAYMENT FOR CLEANING NEW, ALTERED, ADJUSTED, OR REBUILT CATCH BASINS.
- 31. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PREVENT LOSS OF AGGREGATE BASE AND BEDDING SAND MATERIALS FOR SIDEWALK CONSTRUCTION THROUGH ADJACENT GRANITE CURBING BY INSTALLING FILTER FABRIC AT ALL GRANITE CURB JOINTS. FILTER FABRIC SHALL BE INCIDENTAL TO ITEM 609.11.
- 32. THE CONTRACTOR SHALL TAKE PRE-CONSTRUCTION PHOTOGRAPHS AND PROVIDE COPIES TO THE OWNER PRIOR TO CONSTRUCTION. THIS WORK SHALL INCLUDE ALL PRIVATE PROPERTY THAT MAY BE IMPACTED BY THE PROJECT.
- 33. THE TOWN SHALL BE RESPONSIBLE FOR OBTAINING THE PERMITS REQUIRED BY THE STATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF THE PERMITS AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION. COPIES OF ALL OBTAINED PERMITS ARE AVAILABLE FOR REVIEW AT THE TOWN HALL. ALL OTHER PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 34. CURB CUT LOCATIONS FOR DRIVEWAYS ARE TO BE FIELD VERIFIED. ADJUST CURB CUTS IF APPROPRIATE
- 35. FLOWS FROM DEWATERING EFFORTS SHALL NOT BE DISCHARGED TO SANITARY OR COMBINED SEWERS
- 36. THE CONTRACTOR IS RESPONSIBLE FOR RELOCATING MAILBOXES, BUSINESS SIGNS AND BOULDERS THAT INTERFERE WITH THE NEW CURB OR SIDEWALK TO WITHIN 100 FEET OF THEIR ORIGINAL LOCATION, AS DIRECTED BY THE ENGINEER AND TOWN, OR AS SHOWN ON THE PLANS.
- 37. ALL AREAS THAT ARE NOT SPECIFICALLY IDENTIFIED ON THE PLANS THAT MUST BE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR THAT ARE NOT TO BE PAVED, INCLUDING, BUT NOT LIMITED TO RETAINING WALLS, WALKWAYS, STEPS, FENCES, AND LANDSCAPE AREAS, SHALL BE RESTORED TO PRE—CONSTRUCTION CONDITION OR BETTER. THIS WORK IS CONSIDERED INCIDENTAL TO THE CONTRACT AND SHALL BE AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 38. THE CONTRACTOR SHALL RESET OR REPLACE EXISTING STREET & TRAFFIC SIGNS DISTURBED BY THE CONTRACTOR'S OPERATIONS IN ACCORDANCE WITH THE M.U.T.C.D. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE TOWN'S PUBLIC WORKS DEPARTMENT. REGULATORY SIGNS SHALL BE TEMPORARILY MOUNTED CLOSE TO THEIR ORIGINAL LOCATION UNTIL SUCH TIME AS THEY CAN BE PERMANENTLY REMOUNTED.
- 39. PAVEMENT AREAS TO BE CUT, GROUND AND OVERLAID SHALL RECEIVE A TACK COAT PRIOR TO NEW PAVEMENT PLACEMENT. RATE OF TACK COAT APPLICATION SHALL BE NOT LESS THAN 0.15 GAL/SY.
- 40. SAWCUTTING IS INCIDENTAL TO PAVING. THERE SHALL BE NO SEPARATE PAYMENT FOR SAWCUTTING.
- 41. CATCH BASINS SHALL BE 4' DIAMETER STRUCTURES WITH CASCADE GRATE AND FRAME UNLESS OTHERWISE INDICATED.
- 42. THE CONTRACTOR SHALL PRODUCE AND FURNISH PROJECT RECORDS AS REQUIRED BY THE CONTRACT DOCUMENTS, INCLUDING, BUT NOT LIMITED TO CONSTRUCTION SCHEDULES, BONDS, SHOP DRAWINGS, WARRANTIES, GUARANTEES, CERTIFICATIONS, AND OTHER SUBMITTALS.
- 43. GUARDRAILS, FENCES AND WALLS THAT ARE REMOVED FOR THE CONTRACTOR'S ACCESS ARE TO BE REINSTALLED AT NO COST TO THE OWNER.
- 44. LIMITS OF WORK IN EXISTING DRIVES ARE APPROXIMATE AS SHOWN ON THE PLANS. ACTUAL LIMITS OF WORK ARE TO BE DETERMINED BY THE CONTRACTOR AND THE TOWN BASED ON THESE DRAWINGS AND SLOPE AS APPROVED BY THE ENGINEER.
- 45. INSULATE WITH 2" RIDGED BOARD STYROFOAM INSULATION OVER ANY WATER MAINS, WATER SERVICE LINES, OR GRAVITY SEWER WHERE COVER IS LESS THAN 5 FT., OR THERE IS LESS THAN 2 FT VERTICAL DISTANCE BETWEEN SEWER OR WATER AND STORM DRAIN PIPE.
- 46. CONSTRUCT TRANSITION RAMPS AT THE ENDS OF ALL SIDEWALKS, DRIVEWAYS, AND ROADWAYS. DETECTABLE WARNING DEVICES SHALL BE INSTALLED ON ALL SIDEWALK TRANSITION RAMPS AT ROADWAY INTERSECTIONS OR AS OTHERWISE SHOWN ON THE PLANS. SIDEWALKS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
- 47. THE CONTRACTOR IS TO TAKE SPECIAL CARE NOT TO DAMAGE TREES WITHIN THE CONSTRUCTION AREA UNLESS THEY ARE NOTED TO BE REMOVED. TREES TO BE REMOVED ARE TO HAVE THE STUMPS REMOVED AND THE PITS SHALL BE LOAMED AND SEEDED.
- 48. ALL STANDARD DETAILS ARE IN THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD DETAILS, REV. DECEMBER 2002, AND THE LATEST REVISIONS.
- 49. ALL EXISTING WATER SYSTEM GATE VALVES SHALL BE OPERATED BY THE KITTERY WATER DISTRICT. THE CONTRACTOR SHALL COORDINATE WITH THE KITTERY WATER DISTRICT FOR ANY WORK REQUIRING SHUTDOWN OF THE WATER MAIN.
- 50. THE KITTERY WATER DISTRICT WILL BOTH REPAIR ALL VALVE BOXES THAT ARE IN NEED OF REPLACEMENT AND ALSO RAISE THESE TO GRADE PRIOR TO HOT TOP/CONCRETE INSTALLATION, AND WILL MAKE ALL ADJUSTMENTS TO THE WATER SYSTEM. IF THE WATER DISTRICT DETERMINES THE CONTRACTOR SHALL INSTALL NEW VALVE BOXES AND COVERS, THE WATER DISTRICT WILL PROVIDE THE NEW VALVE BOXES AND COVERS, AND WILL PAY FOR THEIR INSTALLATION OUTSIDE OF THIS CONTRACT. THE CONTRACTOR IS TO COORDINATE DIRECTLY WITH THE KITTERY WATER DISTRICT ON PAYMENT TIMING, AND REQUIREMENTS FOR THIS WORK.
- 51. ALL AREAS THAT ARE EXCAVATED, FILLED, OR OTHERWISE DISTURBED BY THE CONTRACTOR WHICH ARE NOT TO BE PAVED OR FINISHED WITH BARK MULCH SHALL BE LOAMED, GRADED, LIMED, FERTILIZED, SEEDED, AND MULCHED, UNLESS OTHERWISE NOTED. THE TOP 4 INCHES OF SOIL SHALL BE LOAM. THE CONTRACTOR SHALL WATER THE SEEDED AREA TO AID IN THE ESTABLISHMENT OF THE NEW SEED.
- 52. TEST PITS ARE REQUIRED TO LOCATE AND RECORD EXISTING UTILITIES AND MITIGATE POTENTIAL INTERFERENCE. THE CONTRACTOR IS RESPONSIBLE FOR RECORDING INFORMATION OBTAINED FROM TEST PITS AND RELAYING THAT INFORMATION TO THE ENGINEER. TEST PITS ARE NOT TO BE BACKFILLED WITHOUT THE ENGINEER'S PERMISSION.
- 53. SIDEWALKS SHALL NOT BE INSTALLED UNTIL KITTERY WATER DISTRICT HAS RELOCATED THE AFFECTED EXISTING CURB STOPS AND EXISTING WATER SERVICES.
- 54. INSTALL A "LIP" AT EACH DRIVEWAY THAT SLOPES AWAY FROM THE EDGE OF PAVEMENT TO PREVENT ROAD RUNOFF FROM ENTERING DRIVEWAYS.

LAYOUT NOTES

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND GRADES AS SHOWN ON THE DRAWINGS. THE SURVEY WAS UNDERTAKEN USING A LOCAL COORDINATE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING HORIZONTAL CONTROL POINTS AND FOR MAINTAINING THIS INFORMATION THROUGHOUT THE COURSE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL ELEVATION REFERENCE INFORMATION PRIOR TO USE IN CONSTRUCTION. REPORT ANY LAYOUT DISCREPANCIES IMMEDIATELY TO THE ENGINEER.
- 2. THE LOCATION AND LIMITS OF ALL ON-SITE WORK AND STORAGE AREAS SHALL BE REVIEWED/COORDINATED WITH, AND ACCEPTABLE TO, THE OWNER AND ENGINEER. THE CONTRACTOR SHALL LIMIT HIS ACTIVITIES TO THESE AREAS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REESTABLISHING AND RESETTING ALL EXISTING PROPERTY MONUMENTATION DISTURBED BY HIS OPERATIONS. THIS WORK SHALL BE PERFORMED BY A LAND SURVEYOR REGISTERED IN THE STATE OF MAINE, AT NO ADDITIONAL COST TO THE OWNER.
- 4. VERTICAL DATUM IS NAVD88: PROJECT BENCHMARK IS A USGS DISK STAMPED "R-99 1943". ELEVATION = 33.86"

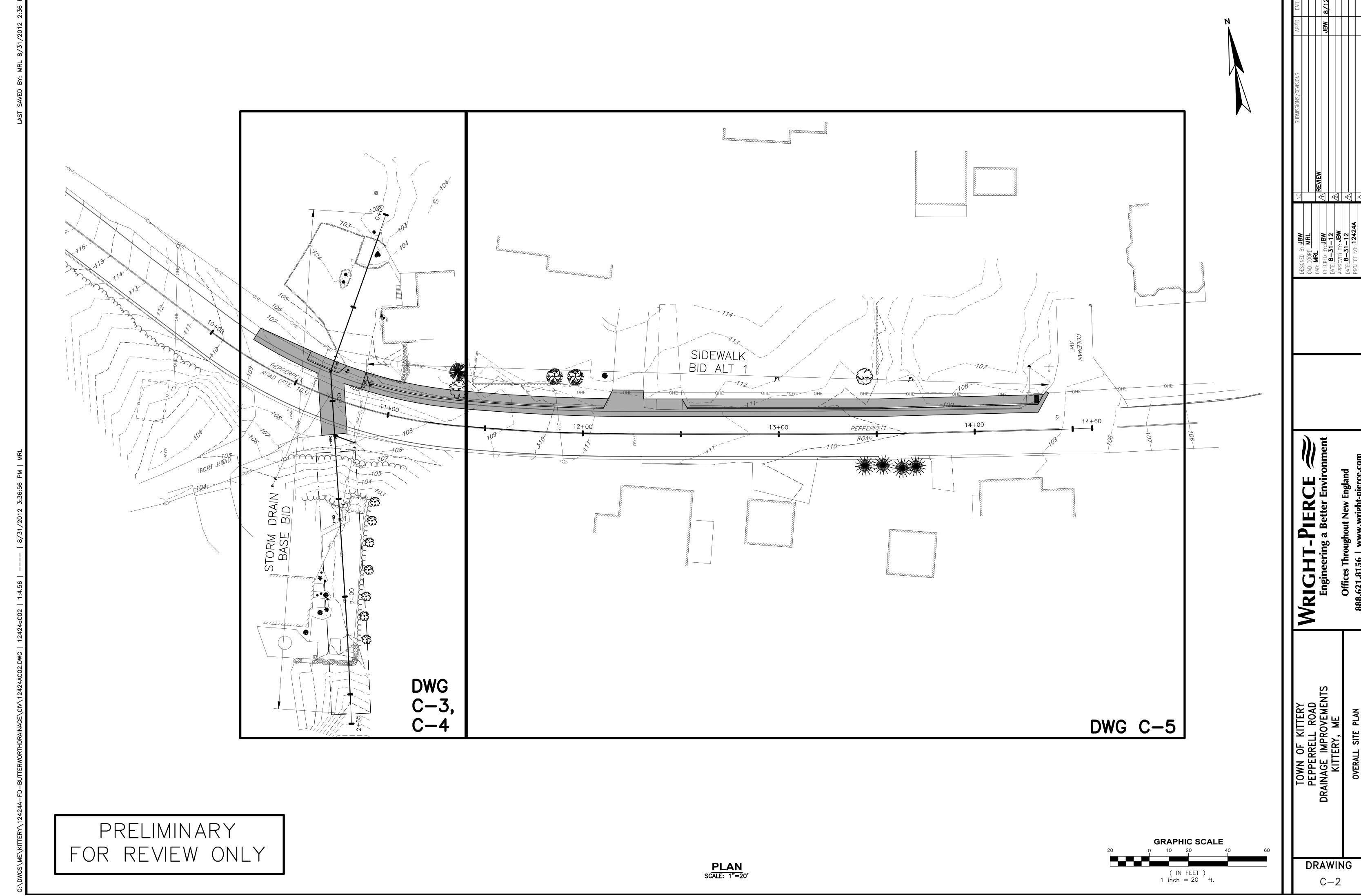
LEGEND CIVIL ABBREVIATIONS **PROPOSED** PROPERTY/ROW LINE ø, DIA DIAMETER SETBACK LINE #, NO NUMBER EASEMENT LINE **APPROVED** CENTERLINE **BUILDING** BLDG EDGE OF PAVEMENT CATCH BASIN CB CEN CENTER CURBING CFS CUBIC FEET PER SECOND EDGE OF GRAVEL CAST IRON CI EDGE OF CONCRETE CENTERLINE CORRUGATED METAL PIPE ----(124)----- ---122---CONTOUR CO CLEANOUT BUILDING CONCRETE CONC STONEWALL ∞ ∞ COR CORNER CY CUBIC YARD $\bigcirc \bigcirc$ TREELINE $\sim\sim\sim\sim$ DEMO DEMOLITION CHAIN LINK FENCE $\longrightarrow \longrightarrow \longrightarrow$ DRAIN MANHOLE STOCKADE FENCE DUCTILE IRON DRAIN BARB WIRE FENCE **DRAWING** DWG RETAINING WALL **ELEVATION** GUARDRAIL **ELECTRIC MANHOLE** 8"S FORCE MAIN SEWER <u>4</u>"F<u>M</u> FEET FT SEWER FORCE MAIN 4"G **HYDRANT** ____8"W WATER INCH ____15"SD **INFLUENT** STORM DRAIN INVERT ____6"UD____ **UNDERDRAIN POUNDS** _ 12" CMP _ _ 1 __<u>12" CMP</u>__ CULVERT **MAXIMUM MANHOLE** ____UGE____ - UNDERGROUND ELECTRIC ———UGE— **MINIMUM** OVERHEAD ELECTRIC ——— OHE ——— ——OHE—— MONITORING WELL IRON PIPE/REBAR NORTH NATIONAL GEODETIC VERTICAL DATUM DRILLHOLE NOT AVAILABLE/APPLICABLE MONUMENT NOT TO SCALE NTS SURVEY CONTROL POINT OD OUTSIDE DIAMETER PERFORATED CLAY _x124.6 SPOT ELEVATION PSF POUNDS PER SQUARE FOOT SEWER MANHOLE SMH \bigcirc SMH PSI POUNDS PER SQUARE INCH $\bigcirc DMH$ DRAINAGE MANHOLE DMH PRIMARY SLUDGE POINT OF TANGENCY ■CB ●CB $\bigoplus CB \equiv CB$ CATCH BASIN PVC POLYVINYL CHLORIDE **■**EMH \square EMH ELECTRIC MANHOLE RCP REINFORCED CONCRETE PIPE \square TMH TELEPHONE MANHOLE **■**TMH RD ROOF DRAIN REQ'D REQUIRED SHUTOFF VALVE M SLOPE, SEWER WATER SERVICE SHUTOFF STORM DRAIN YARD HYDRANT SQUARE FEET SANITARY SEWER MANHOLE HYDRANT **SQUARE** UTILITY POLE STATION UTILITY POLE W/ GUY T, XFMR TRANSFORMER UTILITY POLE W/ LIGHT TEMPORARY BENCH MARK **THICKNESS** LIGHT POLE TOP OF STRUCTURE FLAGPOLE UNDERDRAIN UD UG **UNDERGROUND** CONIFEROUS TREE UGE UNDERGROUND ELECTRIC **DECIDUOUS TREE** VITRIFIED CLAY VC \Box SHRUB POTABLE WATER EDGE OF WATER _..._.. STREAM ----- EDGE OF WETLANDS FLOODPLAIN ----WETLANDS DRAINAGE FLOW DRAINAGE SWALE PAVEMENT MARKINGS **→** €. SIGN MAILBOX TEMPORARY BENCH MARK TEST PIT TEST BORING TEST PROBE \bigcirc P-4 MW−5 MONITORING WELL LIMIT OF WORK SILT FENCE ____ × ___ × ___ RIPRAP RAILROAD

PRELIMINARY FOR REVIEW ONLY

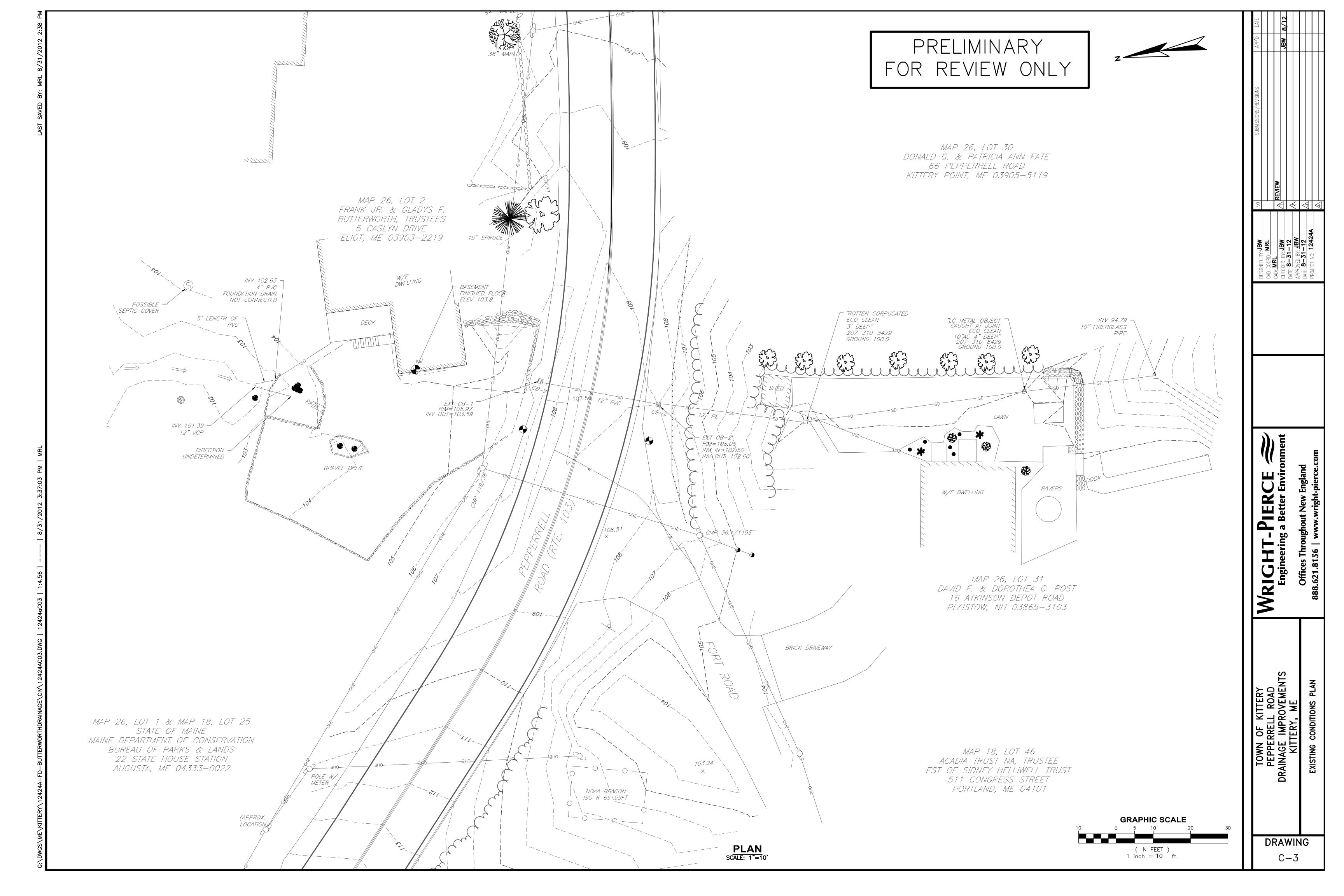
MATCHLINE

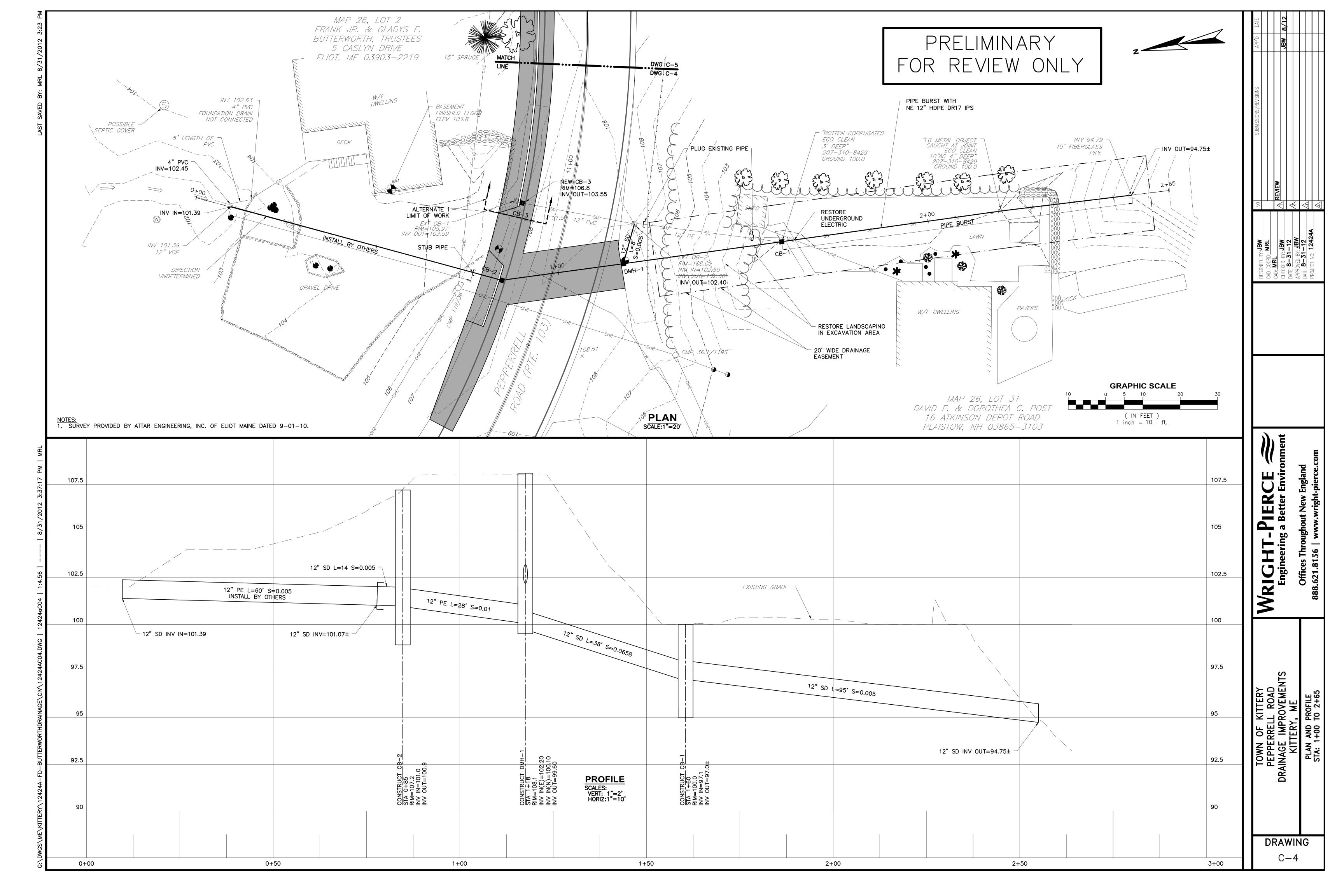
ROCK OUTCROP

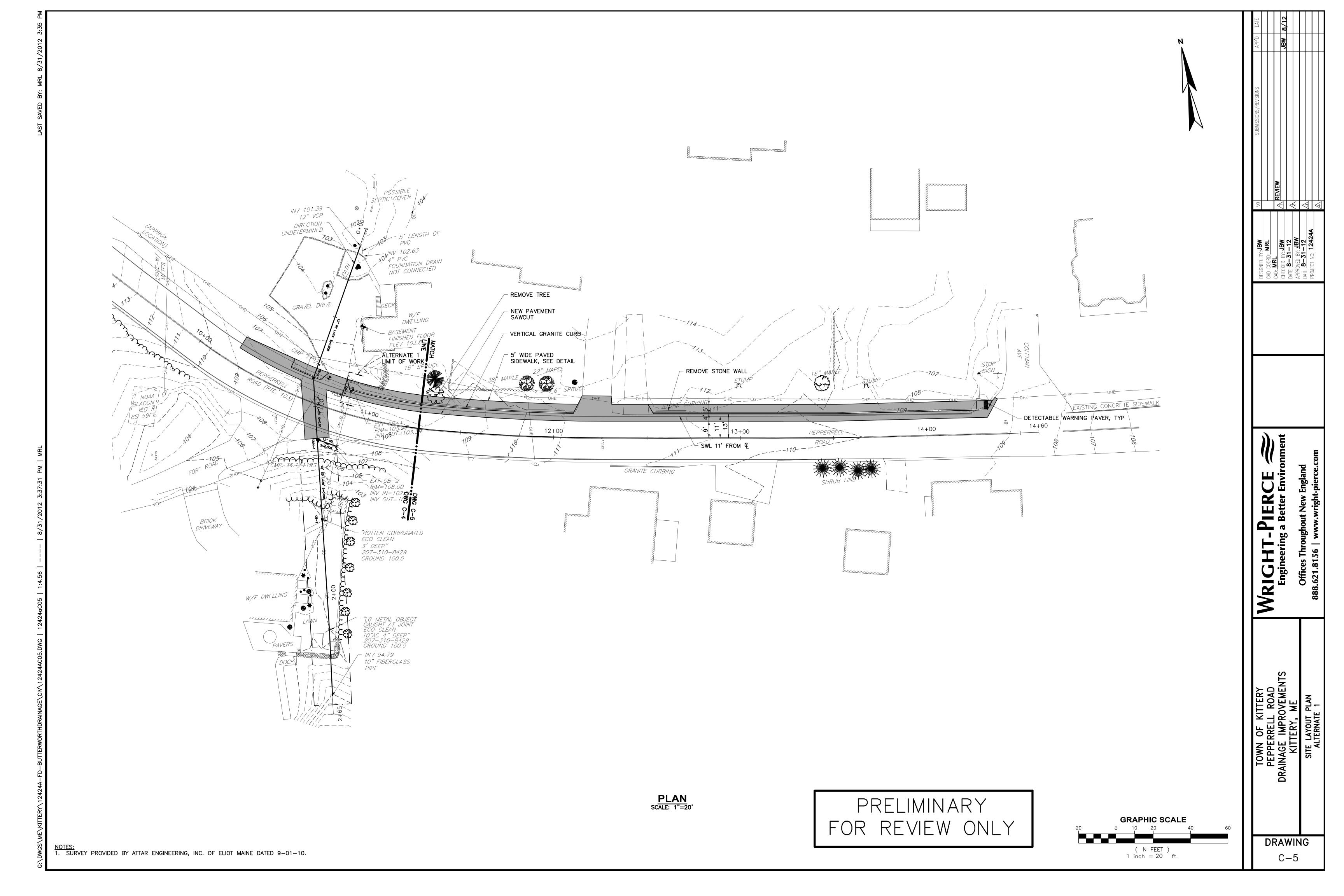
Ш Engi ⋖⋝ TOWN PEPPI AINAGE DRAWING C-1

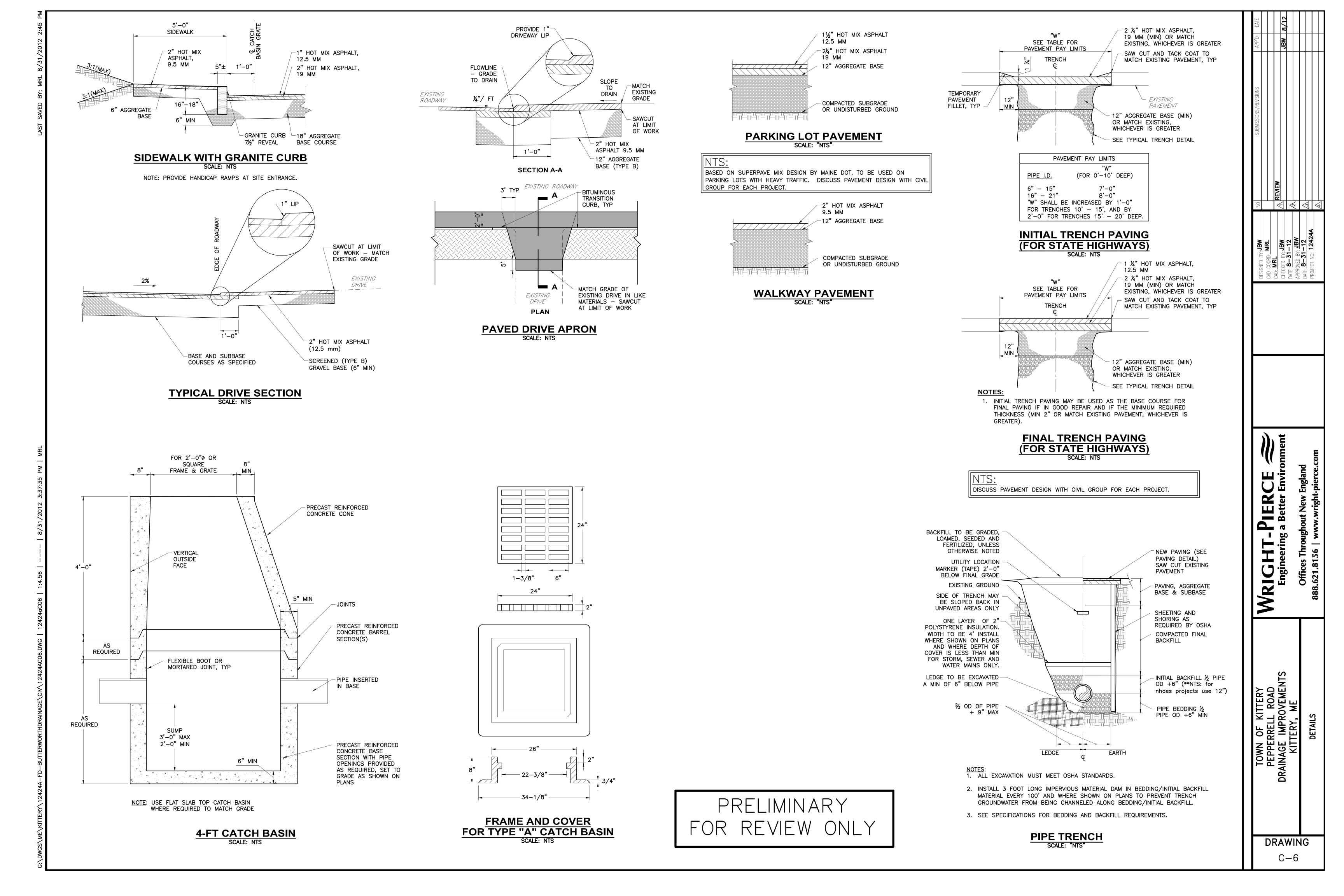


Offices Throughout New Englan 888.621.8156 | www.wright-pierce









EROSION AND SEDIMENTATION CONTROL NOTES

THIS PLAN HAS BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION IN DEVELOPING AREAS AS CONTAINED IN THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES", MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DATED MARCH 2003.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL STRUCTURES ARE SHOWN ON THE SITE PLAN.

- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES", MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 2003.
- 2. THOSE AREAS UNDERGOING ACTUAL CONSTRUCTION WILL BE MAINTAINED IN AN UNTREATED OR UNVEGETATED CONDITION FOR THE MINIMUM TIME REQUIRED. IN GENERAL AREAS TO BE VEGETATED SHALL BE PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL GRADING AND TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF THE SOIL.
- 3. SEDIMENT BARRIERS (SILT FENCE, STONE CHECK DAMS, ETC.) SHOULD BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF UPGRADIENT DRAINAGE AREAS.
- 4. INSTALL SILT FENCE AT TOE OF SLOPES TO FILTER SILT FROM RUNOFF. SEE SILT FENCE DETAIL FOR PROPER INSTALLATION. SILT FENCE WILL REMAIN IN PLACE PER NOTE #5.
- 5. ALL EROSION CONTROL STRUCTURES WILL BE INSPECTED, REPLACED AND/OR REPAIRED EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT OR WHEN NO LONGER SERVICEABLE DUE TO SEDIMENT ACCUMULATION OR DECOMPOSURE. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.
- 6. NO SLOPES, EITHER PERMANENT OR TEMPORARY, SHALL BE STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL (2 TO 1) UNLESS STABILIZED WITH RIPRAP OR OTHER STRUCTURAL MEANS.
- 7. IF FINAL SEEDING AND SODDING IS NOT EXPECTED PRIOR TO THE ANTICIPATED DATE OF THE FIRST KILLING FROST, USE TEMPORARY ANNUAL RYEGRASS SEEDING AND MULCHING ON ROUGH GRADED SUBSOIL TO PROTECT THE SITE AND DELAY PERMANENT LOAMING, FINE GRADING, AND SEEDING OR SODDING UNTIL SPRING.
- 8. WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISH GRADED SHALL BE COMPLETED 30 DAYS PRIOR TO THE FIRST KILLING FROST.
- 9. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT WILL BE RETURNED TO THE SITE AND REGRADED ONTO OPEN AREAS. POST SEEDING SEDIMENT, IF ANY, WILL BE DISPOSED OF IN AN ACCEPTABLE MANNER.
- 10. REVEGETATION MEASURES WILL COMMENCE UPON COMPLETION OF CONSTRUCTION EXCEPT AS NOTED ABOVE. ALL DISTURBED AREAS NOT OTHERWISE STABILIZED WILL BE GRADED, SMOOTHED, AND REVEGETATED.
- 11. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE IS STABILIZED.
- 12. STABILIZATION SCHEDULE BEFORE WINTER:

SEPTEMBER 15
ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED.
ALL SLOPES MUST BE STABILIZED, SEEDED AND MULCHED.
SLOPES 3:1 OR GREATER TO BE STABILIZED WITH EROSION
ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL

SLOPES 3:1 OR GREATER TO BE STABILIZED WITH EROSION CONTROL MATTING AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH AN ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND MULCHED.

OCTOBER 1 ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED

WITH MULCH OR EROSION CONTROL BLANKET.

NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THAT DATE.

ALL DISTURBED AREAS WHERE THE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED BY

VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.

1. WINTER CONSTRUCTION PERIOD DEFINED: NOVEMBER 1 THROUGH APRIL 15

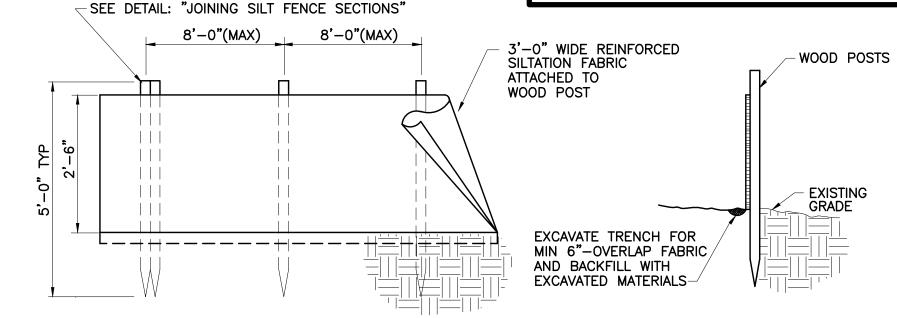
EROSIONCONTROL - WINTER CONSTRUCTION

- 2. WINTER EXCAVATION AND EARTHWORK SHALL BE DONE SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
- 3. EXPOSED AREA SHOULD BE LIMITED SUCH THAT THE AREA CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT.
- 4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT EROSION CONTROL PROTECTION AS LISTED IN ITEM 2 ABOVE.
- 5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW AT A RATE OF 100 LB. PER 1,000 SQUARE FEET (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.
- 6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE—FREEZING TEMPERATURES, THE SLOPES SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED AND IS SMOOTH, THEN THE AREA MUST BE STABILIZED WITH MULCH. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE GRADED BEFORE FREEZING AND THE SURFACE TEMPORARILY PROTECTED FROM EROSION BY THE APPLICATION OF MULCH. SLOPES SHALL NOT BE LEFT EXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS.
- 7. THE APPLICATION OF MULCH TO FINE GRADED AREAS WILL BE STABILIZED AS FOLLOWS:
 A) BETWEEN THE DATES OF NOVEMBER 1ST AND APRIL 15TH ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION, CHEMICAL TACK OR WOOD CELLULOSE FIBER.
- B) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GRATER THAN 8%.
- C) MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1ST, THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
- 8. AFTER NOVEMBER 1ST THE CONTRACTOR SHALL APPLY MULCH AND ANCHORING ON ALL BARE EARTH AT THE END OF EACH WORKING DAY.
- 9. DURING WINTER CONSTRUCTION PERIODS ALL SNOW SHALL BE REMOVED FROM AREAS OF MULCHING PRIOR TO PLACEMENT.

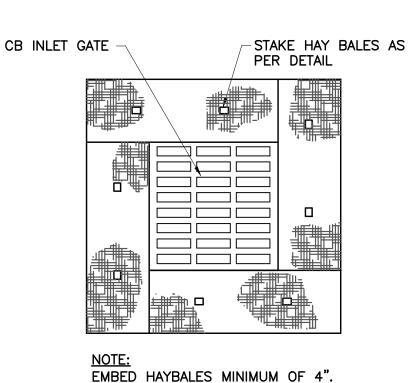
EROSION CONTROL - WETLAND NOTES

- 1. WETLANDS AND SURFACE WATERS (EXCEPTING THOSE WHICH ARE TO BE FILLED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS) WILL BE PROTECTED WITH SILT FENCE INSTALLED AT THE EDGE OF THE WETLAND OR THE BOUNDARY OF WETLAND DISTURBANCE.
- 2. IF THE WORK INCLUDES CROSSING OF WETLANDS AND/OR STREAMS, THE CONTRACTOR SHALL TAKE SPECIAL PRECAUTIONS WORKING IN THESE AREAS
- 3. ANY WETLAND CROSSING WORK SHALL BE COMPLETED BETWEEN THE PERIOD OF MAY 1 AND SEPTEMBER 30
- 4. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION WITHIN OR ADJACENT TO WETLAND AREAS.
- 5. WETLAND VEGETATIVE LAYERS SHALL BE REMOVED AND SALVAGED FOR RESTORATION OF THE DISTURBED AREAS.
- 6. STORAGE AREAS FOR WETLAND MATERIALS SHALL BE PROPERLY PROTECTED AGAINST EROSION.
- 7. SEEDING OF THE DISTURBED AREAS WITHIN WETLAND AREAS SHALL UTILIZE MIXTURES APPROPRIATE FOR WETLAND AREAS AS OUTLINED IN THE SPECIFICATIONS.

PRELIMINARY FOR REVIEW ONLY



SILT FENCE INSTALLATION DETAIL SCALE: "NTS"



HAY BALE CB INLET PROTECTION

COMBINATION SILT FENCE

AND HAY BALE BARRIER

CROSS SECTION

PROFILE

BOTTOM OF DITCH-

SCALE: "NTS"

TO 3" STONE

STONE CHECK DAM DETAIL

WOOD POSTS

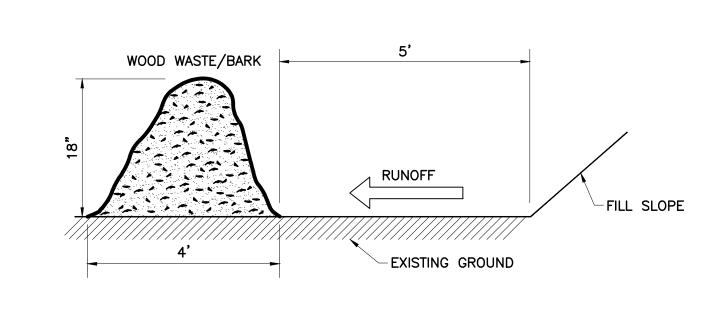
(FT/FT)

100

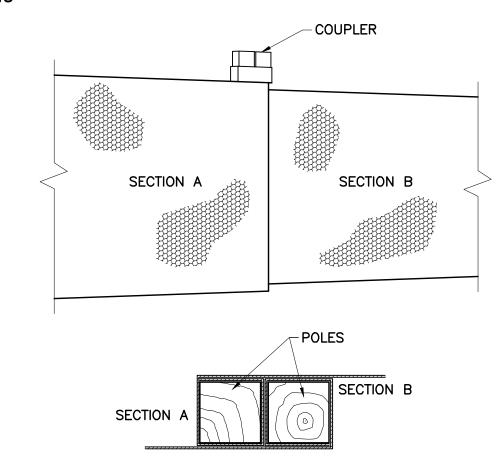
0.020 0.030 0.040 0.050 0.080 0.100

0.120 0.150

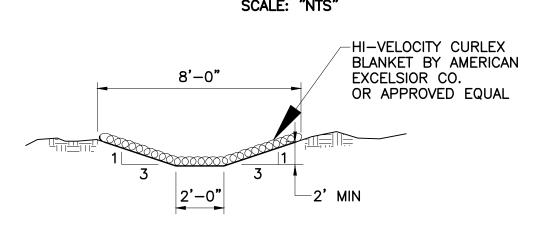
HAYBALE



WOOD WASTE/BARK FILTER BERM



JOINING SILT FENCE SECTIONS



EROSION CHECK TO BE STRAW HAYBALES SECURED TO THE GROUND
WITH TWO 4' LONG GRADE STAKES FOR EACH BALE. SAND BAG
AS REQUIRED, PLACE SUFFICIENT BALES TO ESTABLISH ELEVATIONS
AT (A)" AT LEAST 6 INCHES ABOVE OVERFLOW AT (B)"

EROSION CONTROL MATTING - DITCHES
SCALE: "NTS"

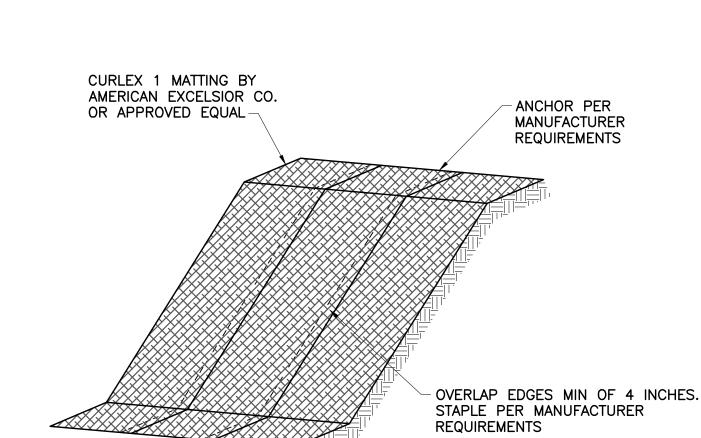
GRADE STAKES

-STRAW HAYBALE

-SAND BAG

-EXISTING OR

PROPOSED

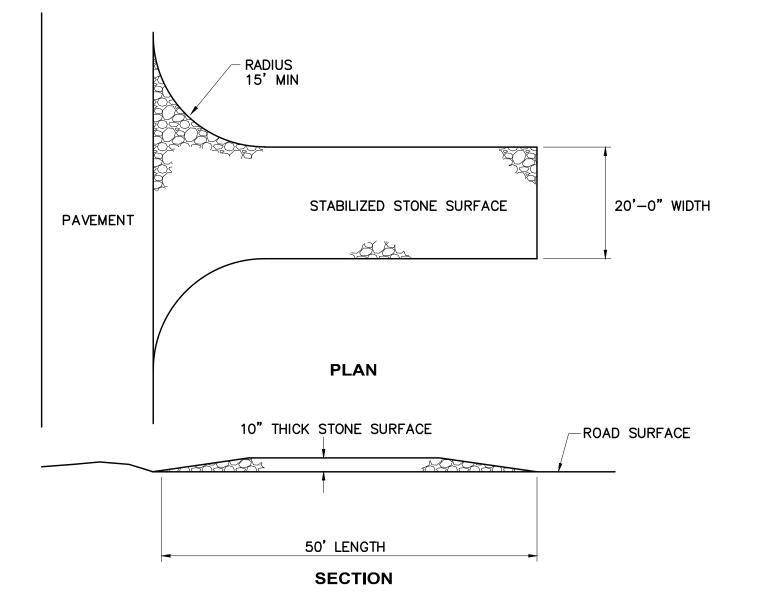


STRAW HAY BALE CHECK DAM

SCALE: "NTS"

INSTALL ON SLOPES 3:1 OR GREATER

EROSION CONTROL MATTING - SLOPES



(TEMPORARY, TO BE REMOVED PRIOR TO FINAL SITE PAVING)

STABILIZED CONSTRUCTION ENTRANCE
SCALE: "NTS"

HT-PIERCE eering a Better Environment Throughout New England

RELL ROAD
IMPROVEMENTS
IERY, ME
ON CONTROL
AND DETAILS

ing

TOWN OF K
PEPPERRELL
DRAINAGE IMPR
KITTERY,
EROSION CO

DRAWING C-7